

First Hit

L6: Entry 2 of 15

File: JPAB

Jan 16, 1998

DOCUMENT-IDENTIFIER: JP 10010308 A

TITLE: HOLOGRAM, CONDENSING OPTICAL SYSTEM FORMED BY USING HOLOGRAM AS WELL AS
OPTICAL HEAD DEVICE OPTICAL DISK DEVICE HAVING THIS CONDENSING OPTICAL SYSTEMAbstract Text (1):

PROBLEM TO BE SOLVED: To decrease the light quantity of the light quantity of unnecessary diffracted light by setting the diffraction efficiency of zero order diffracted light and +1st order diffracted light higher than the diffraction efficiency of the diffracted light of any other order and specifying the respective values of the diffraction efficiency.

Abstract Text (2):

SOLUTION: A hologram lens 107 is so designed that the diffraction efficiency of its +1st order diffracted light 64 is <100% and that the lens has sufficient strength even to the zero order diffracted light (transmitted light) 61 of a light beam 3. This zero order diffracted light 61 is condensed to the position of the recording surface 38a of an information recording medium 51 having a small substrate thickness t2 by an objective lens 4. The +1st order diffracted light 64 is condensed to the position of the recording surface 38b of an information recording medium 5 having a large substrate thickness t1. In such a case, the diffraction efficiency of the zero order diffracted light 61 and the -1st order diffracted light 64 is higher than the diffraction efficiency of the diffracted light of any other order and the values of the diffraction efficiency of the zero order diffracted light 61 and the 1st order diffracted light 64 are both $\geq 30\%$. The diffraction efficiency of one of the +2nd order diffracted light and the -1st order diffracted light is $\leq 2\%$.

First Hit**End of Result Set** **Generate Collection**

L7: Entry 1 of 1

File: JPAB

Apr 8, 1997

PUB-NO: JP409097448A
DOCUMENT-IDENTIFIER: JP 09097448 A
TITLE: OPTICAL PICKUP

PUBN-DATE: April 8, 1997

INVENTOR-INFORMATION:

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INT-CL (IPC): G11 B 7/135; G02 B 5/18; G02 B 5/30

ABSTRACT:

PROBLEM TO BE SOLVED: To improve the reliability of tracking control by providing two light sources and diffraction gratings corresponding to them and driving the light sources independently of each other, and then making two light beams, which are different in wavelength from each other, nearly equal in three-spot interval and different in gradient.

SOLUTION: A 1st light source 11 emits a TM-mode light beam of 635nm and a 2nd light source 12 emits a TE-mode light beam of 780nm. A 1st polarization-dependent three-beam diffraction grating 171 provides a 3-beam diffracting function only for the TM-mode light beam and the 2nd polarization-dependent 3-beam diffraction grating 172 provides a 3-beam diffracting function only for the TE-mode light beam. And, the 1st light source 11 or 2nd light source 12 is driven selectively by unillustrated driving selecting means.

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